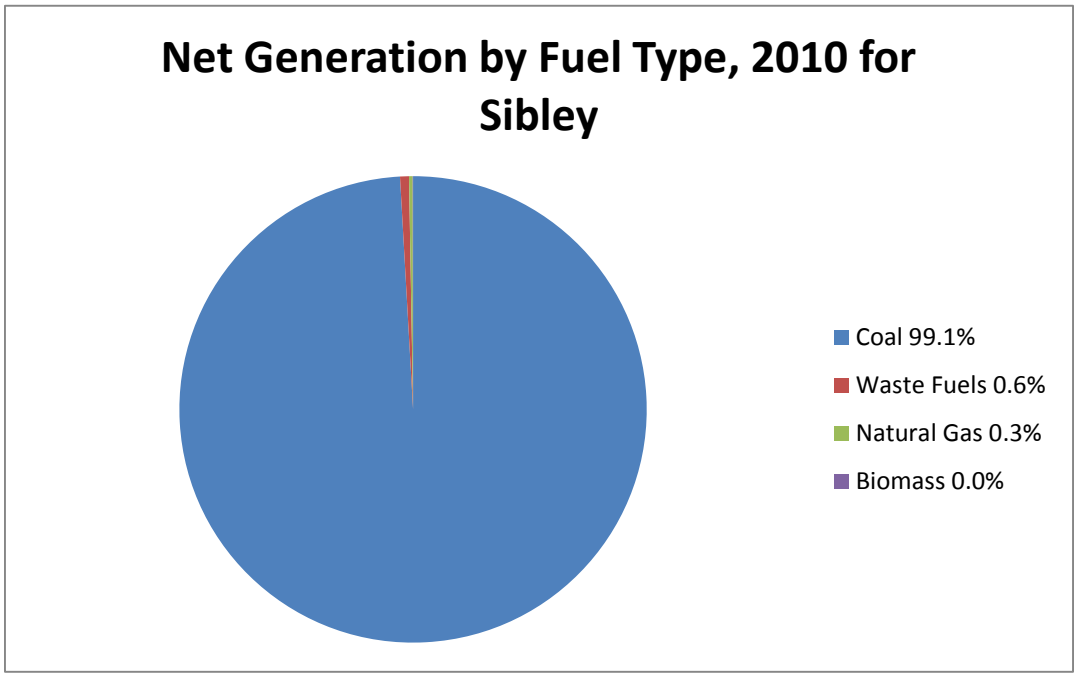
Missouri Department of Natural Resources

KCP&L Greater Missouri Operations Company
Power Plant Name: Sibley
Electric Generation and Emissions in 2010

Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal	29,348,774	99.7%	99.1%	2,763,354	99.7%	99.1%
Natural Gas	74,228	0.3%	0.3%	6,990	0.3%	0.3%
Petroleum						
Nuclear						
Other						
Non-renewable total	**29,423,002**	**100.0%**	**99.4%**	**2,770,343**	**100.0%**	**99.4%**
Renewable sources						
Biomass	7,519	4.0%	0.0%	717	4.0%	0.0%
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels	180,485	96.0%	0.6%	17,108	96.0%	0.6%
Wind						
Wood						
Renewable total	**188,004**	**100.0%**	**0.6%**	**17,825**	**100.0%**	**0.6%**
Grand total	**29,611,006**		**100.0%**	**2,788,168**		**100.0%**

Fuel Type	Physical Units	Number of Units
Anthracite Coal and Bituminous Coal	Short Tons	253,886
Sub-bituminous Coal	Short Tons	1,331,426
Gaseous Propane	MCf	28,385
Agricultural Crop Byproducts	Short Tons	482
Tire-derived Fuels	Short Tons	6,685


Net Generation by Fuel Type, 2010 for Sibley
Coal 99.1%
Waste Fuels 0.6%
Natural Gas 0.3%
Biomass 0.0%

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Power Plant Nameplate information for Sibley

Plant Name	County Location	Generator	Generator Type	Generator Status	Nameplate Capacity (MW)
Sibley		*All Operating Generators*			*2,096.0*
Sibley	Jackson	1	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	220.0
Sibley	Jackson	2	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	200.0
Sibley	Jackson	3	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	1,676.0

Emissions from Electricity Generated in 2010: Sibley

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
Sibley	108,296,913	12,572,251	1,449,997	210,564

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
Sibley	28,425	0.0116	0.0115

Identified Flue Gas Desulfurization (FGD) controls installed on Sibley power plant

Plant	Control Equipment	Sorbent Type
	No FGD Controls Installed	

Identified Flue Gas Particulate (FGP) controls installed on Sibley power plant

Plant	Control Equipment
Sibley	Electrostatic precipitator, cold side, without flue gas conditioning

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Notes:
Generation, emissions and pollution control data include power plants owned by the utility and located in Missouri.

Emissions data calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data

Fuel Consumption and Generation Data from United States Energy Information Administration, Form 923, United States Department of Energy
http://www.eia.gov/electricity/data/eia923

Pollution control data (FGD and FGP equipment) from United States Energy Information Administration, Form 860, United States Department of Energy
http://www.eia.gov/electricity/data/eia860/index.html

Emissions factors for fuel-based generation from United States Environmental Protection Agency "Emission Factors for Greenhouse Gas Inventories", November 7, 2011,
http://www.epa.gov/climateleadership/documents/emission-factors.pdf